RUTGERS

WINLAB | Wireless Information Network Laboratory

Data Infrastructure Management 2024

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Objective

Deploy Linux diskless systems for installation and provisioning with Warewulf and manage our own servers

Warewulf

Warewulf Services:
- **DHCP**
  - Provides network devices with Ips
- **TFTP**
  - Provides the IPXE OS Bootloader
- **Warewulfd**
  - Deploys the OS onto the node
- **VNFS Image**
 - Contains the OS and additional configurations

Warewulf Commands:
- wwctl container [import, shell, list]
- wwctl profile [set, list]
- wwctl node [add, set, status, delete, list]
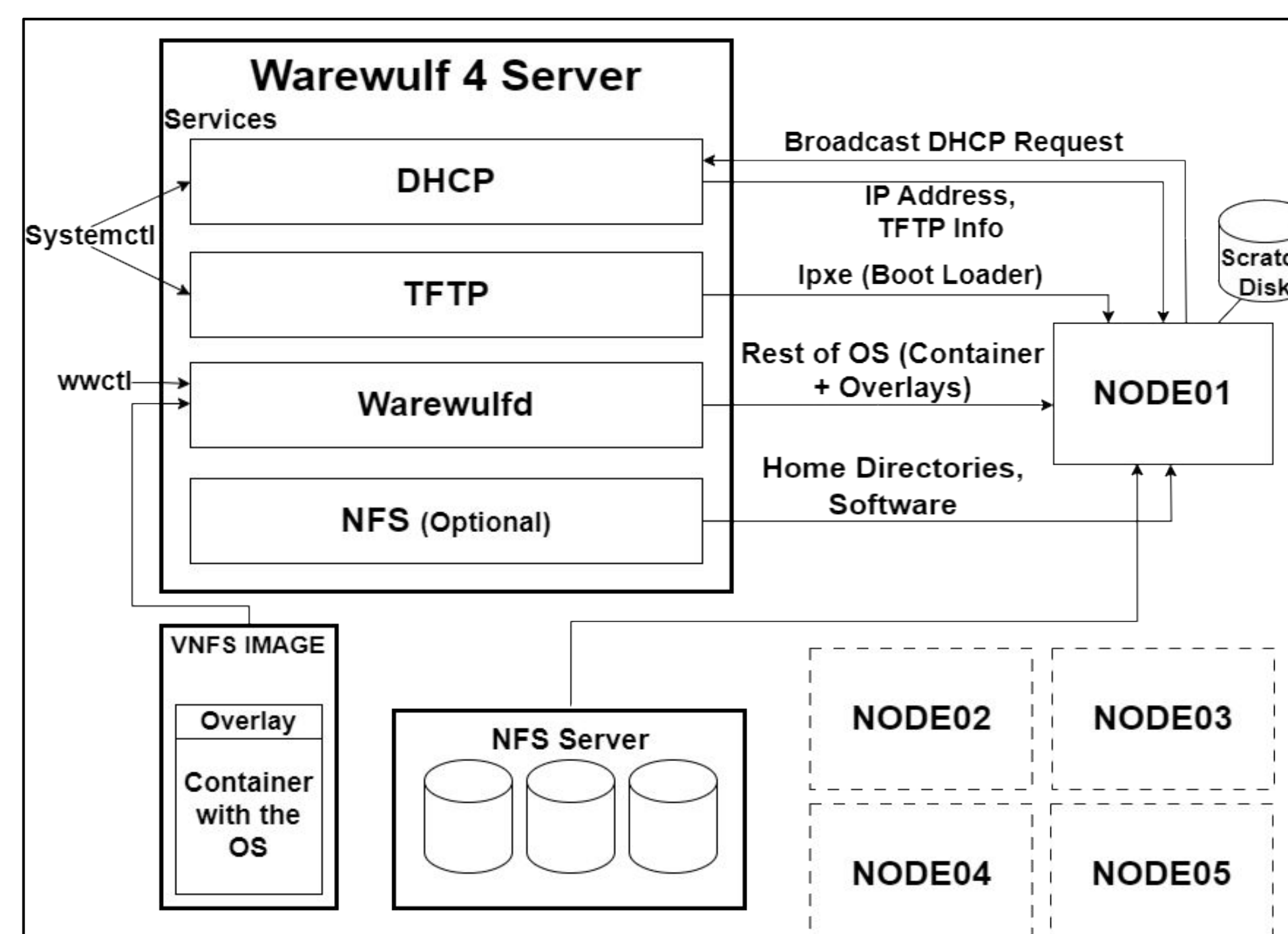- wwctl overlay build

Wiki ←

The Environment

Wireguard - VPN that creates a tunnel connection to our nodes
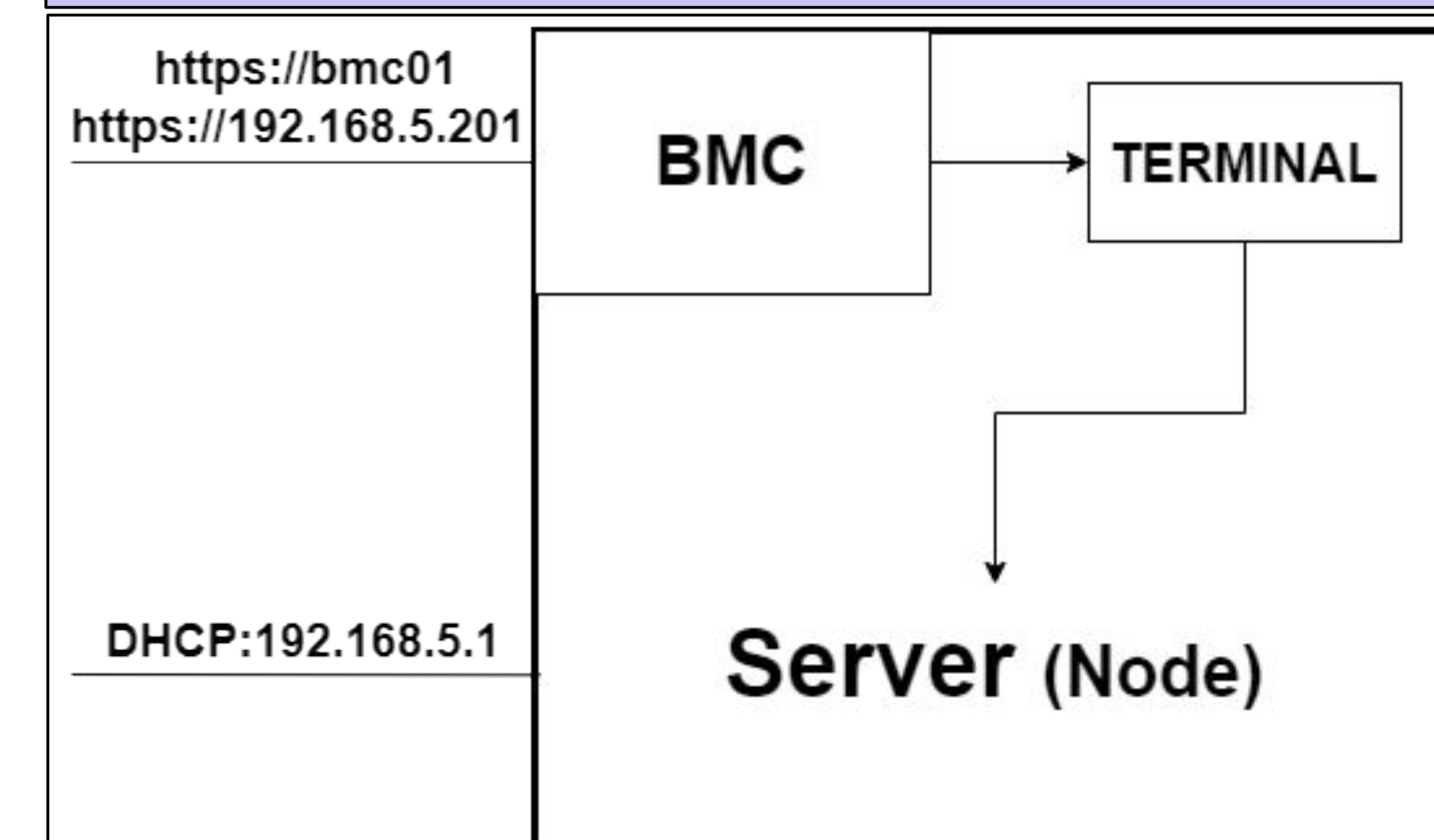**Nodes** - Physical servers we used for Warewulf testing
Proxmox - Virtual machines we used to host Warewulf

Connection to the Infrastructure
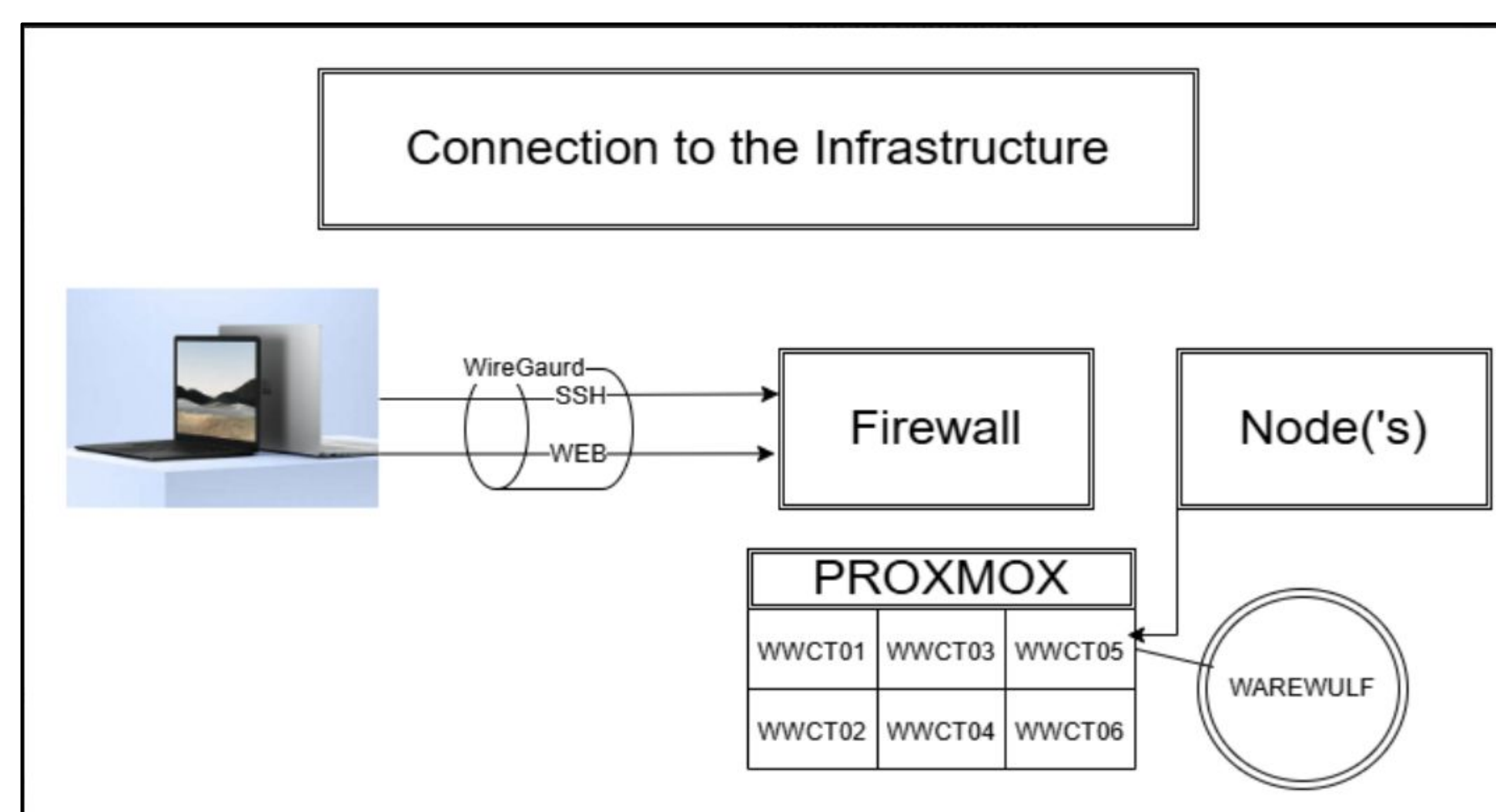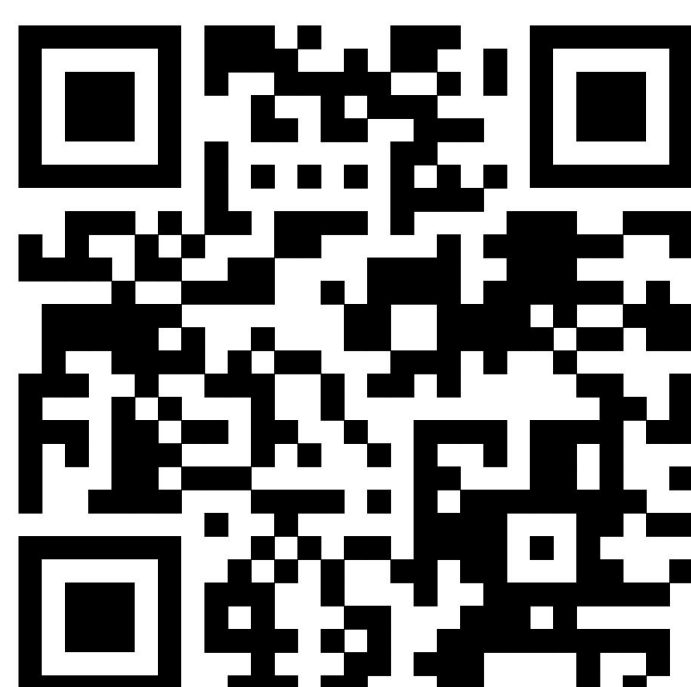
Warewulf Workflow

Warewulf Netboot

Future Plans

We plan to make Warewulf more usable and customizable by developing python and shell scripts to manage containers and overlays.

Acknowledgements

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